

# REMARKS

Claims 1-3, 5, 7-9, and 15 are presently pending. Claims 4, 6, and 10-13 are cancelled without prejudice. Claim 15 is added. Reconsideration and continued examination are respectfully requested.

Claims 1-3, 5, and 7-9 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent No. 6,310,921 ("Yoshioka") in view of U.S. Patent No. 5,706,059 ("Ran").

Claim 1 recites, among other limitations, "wherein the second state machine loads the memory controller with the second portion while the memory controller fetches the reference pixels". Claim 5 recites, among other limitations, "wherein the memory controller loads the second portion of the picture while fetching the reference pixels". Examiner has indicated that "Yoshioka is silent as to the second state machine loads the memory controller with the second portion while the memory controller fetches as claimed. Ran teaches the second state machine loads the memory controller with the second portion while the memory controller fetches. [abstract; col. 3 lines 4-10]."

Ran, Col. 3, Lines 4-10 merely recites:

Typically, each set of locks includes a central block and four blocks offset on x and y axes. Blocks most similar to the target block provide co-ordinates of a center block in a next stage of the search. The hierarchical search searches regions indicated by previous comparisons to be similar to the target block and thereby reduces the number of comparisons and the search time required to find a motion vector.

Assignee respectfully traverses the rejection to claims 1 and 5 because Ran does not even teach "loading the memory controller with the second portion", much less while "the memory controller fetches the reference pixels".

Additionally, even if the foregoing, Ran, is held to teach "loading the memory controller with the second portion while the memory controller fetches the reference pixels", Assignee respectfully traverses the rejection because Yoshioka teaches away from this.

Examiner has indicated that Yoshioka teaches "memory controller fetches the reference pixels [Col. 14 Lines 38-45]" and that "it would be obvious to incorporate the simultaneous read/search and write teachings of Ran with the device of Yoshioka"

Yoshioka, Col. 14, Lines 38-45 recites:

More specifically, for P-pictures or B-Pictures the pixel read/write unit 11 extracts a rectangle area indicated by the motion vector from the decoded reference frame in the external memory 3 via the memory controller 6 and blends the rectangle area with the block processed by the pixel calculation unit 10 to obtain an original block image. The decode result given by the pixel read/write unit 11 here is stored in the external memory 3 via the memory controller 6.

Since the "decode result" is obtained when "pixel read/write unit 11" "blends the rectangle area with the block processed by the pixel calculation unit 10", the "decode result" cannot be "written to the memory controller while the memory controller fetches" the "rectangle area". Accordingly, Yoshioka could not be combined with any "simultaneous read/search and write teachings of Ran", to the extent they exist at all in Ran because the combination would be inoperable and would change the principle operation of Yoshioka.

Accordingly, Assignee respectfully traverses the rejection to claims 1 and 5 and requests that Examiner withdraw them, as well as dependent claims 2, 3, and 7-9.

Finally, Claim 15 is added and recites, among other limitations "wherein the second state machine loads the memory controller with the second portion reconstructed from decoding while the memory controller fetches the reference pixels". It is noted that Ran is directed to "A hierarchial search for moving image encoding". Abstract, Line 1. Assignee respectfully submits that Ran clearly does not teach "wherein the second state machine loads the memory controller with the second portion reconstructed from decoding while the memory controller fetches the reference pixels". Accordingly, allowance is respectfully requested for claim 15, notwithstanding claims 1 and 5.

#### **CONCLUSION**

For at least the foregoing reasons, Assignee respectfully submits that each of the pending claims are allowable and Examiner is respectfully requested to pass this case to issuance. The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,



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